Applicant: Isamu Kobori et al. Attorney's Docket No.: 07977-024003 / US2975D1D1

Serial No.: New Divisional Application

Filed : July 22, 2003

: 6 of 12 Page

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims1-15 (canceled)

Claim 16 (new): A method for forming an active matrix circuit comprising: doping a p-type impurity into a semiconductor layer by ion doping to form a p-type impurity region in said semiconductor layer;

activating said p-type impurity by annealing; and

forming an interlayer insulating film comprising silicon nitride over said semiconductor layer.

Claim 17 (new): A method according to claim 16 wherein said active matrix circuit is incorporated into a liquid-crystal display.

Claim 18 (new): A method according to claim 16 wherein said active matrix circuit is incorporated into an image sensor.

Claim 19 (new): A method according to claim 16 wherein said active matrix circuit is incorporated into a liquid-crystal electro-optical device.

Claim 20 (new): A method according to claim 16 wherein said semiconductor layer comprises an amorphous semiconductor island having a plane area of 1000 μ m² or less.

Applicant: Isamu Kobori et al. Attorney's Docket No.: 07977-024003 / US2975D1D1

Serial No.: New Divisional Application

: July 22, 2003

: 7 of 12 Page

Claim 21 (new): A method according to claim 20 further comprising crystallizing said amorphous semiconductor island.

Claim 22 (new): A method for forming an active matrix circuit comprising: doping a p-type impurity into a semiconductor layer by ion doping to form a p-type impurity region in said semiconductor layer;

activating said p-type impurity by annealing; and

forming an interlayer insulating film comprising a silicon nitride layer and a silicon oxide layer over said semiconductor layer.

Claim 23 (new): A method according to claim 22 wherein said active matrix circuit is incorporated into a liquid-crystal display.

Claim 24 (new): A method according to claim 22 wherein said active matrix circuit is incorporated into an image sensor.

Claim 25 (new): A method according to claim 22 wherein said active matrix circuit is incorporated into a liquid-crystal electro-optical device.

Claim 26 (new): A method according to claim 22 wherein said semiconductor layer comprises an amorphous semiconductor island having a plane area of 1000 μ m² or less.

Claim 27 (new): A method according to claim 26 further comprising crystallizing said amorphous semiconductor island.

Claim 28 (new): A method for forming an active matrix circuit comprising: doping a p-type impurity into a semiconductor layer by ion doping to form a p-type impurity region in said semiconductor layer;

Applicant: Isamu Kobori et al. Attorney's Docket No.: 07977-024003 / US2975D1D1

Serial No.: New Divisional Application

Filed : July 22, 2003 Page : 8 of 12

activating said p-type impurity by annealing;

forming an interlayer insulating film comprising silicon nitride over said semiconductor layer; and

forming a conductive layer comprising a titanium and an aluminum over said interlayer insulating film.

Claim 29 (new): A method according to claim 28 wherein said conductive layer comprises an electrode.

Claim 30 (new): A method according to claim 28 wherein said conductive layer comprises a wiring.

Claim 31 (new): A method according to claim 28 wherein said active matrix circuit is incorporated into a liquid-crystal display.

Claim 32 (new): A method according to claim 28 wherein said active matrix circuit is incorporated into an image sensor.

Claim 33 (new): A method according to claim 28 wherein said active matrix circuit is incorporated into a liquid-crystal electro-optical device.

Claim 34 (new): A method according to claim 28 wherein said semiconductor layer comprises an amorphous semiconductor island having a plane area of $1000 \mu m^2$ or less.

Claim 35 (new): A method according to claim 34 further comprising crystallizing said amorphous semiconductor island.

Applicant: Isamu Kobori et al. Attorney's Docket No.: 07977-024003 / US2975D1D1

Serial No.: New Divisional Application

Filed : July 22, 2003 Page : 9 of 12

Claim 36 (new): A method according to claim 28 wherein said titanium and said aluminum are formed in a multi-layer film.

Claim 37 (new): A method for forming an active matrix circuit comprising:
doping a p-type impurity into a semiconductor layer by ion doping to form a p-type
impurity region in said semiconductor layer;

activating said p-type impurity by annealing;

forming an interlayer insulating film comprising silicon nitride over said semiconductor layer; and

forming a conductive layer comprising a titanium and an aluminum over said interlayer insulating film.

Claim 38 (new): A method according to claim 37 wherein said conductive layer comprises an electrode.

Claim 39 (new): A method according to claim 37 wherein said conductive layer comprises a wiring.

Claim 40 (new): A method according to claim 37 wherein said active matrix circuit is incorporated into a liquid-crystal display.

Claim 41 (new): A method according to claim 37 wherein said active matrix circuit is incorporated into an image sensor.

Claim 42 (new): A method according to claim 37 wherein said active matrix circuit is incorporated into a liquid-crystal electro-optical device.

Applicant: Isamu Kobori et al. Attorney's Docket No.: 07977-024003 / US2975D1D1

Serial No.: New Divisional Application

Filed : July 22, 2003 Page : 10 of 12

Claim 43 (new): A method according to claim 37 wherein said semiconductor layer comprises an amorphous semiconductor island having a plane area of 1000 μ m² or less.

Claim 44 (new): A method according to claim 43 further comprising crystallizing said amorphous semiconductor island.

Claim 45 (new): A method according to claim 37 wherein said titanium and said aluminum are formed in a multi-layer film.